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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,522	08/15/2003	Joseph P. Errico	F-246	3161
51640	7590	01/24/2008		
SPINE MP			EXAMINER	
LERNER, DAVID, et al.			PELLEGRINO, BRIAN E	
600 SOUTH AVENUE WEST				
WESTFIELD, NJ 07090			ART UNIT	PAPER NUMBER
			3738	
			MAIL DATE	DELIVERY MODE
			01/24/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/642,522

Applicant(s)

ERRICO ET AL.

Examiner

Brian E. Pellegrino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/1/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/1/07 has been entered.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the limitation that "only" the perimeter of the groove and "only" the perimeter of the "contact element" is disposed in groove was not described in the specification.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner (5370697) in view of Hedman et al. (4759769). Fig. 5 shows a vertebral

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contact element **44** having a resting shape of a dome convexly extending from an orthopedic device **2**. Baumgartner discloses the contact element is a wire mesh (col. 3, lines 54-57) that is porous. The mesh is fully capable of having a convexity depth or footprint approximating and engaging the depth of a concave surface in vertebrae. However, Baumgartner fails to disclose the outer surface having a groove or an osteoconductive feature, such as a coating adjacent the contact element. Hedman et al. teach (Figs. 1,2) that a recess or groove **34,52** is used in the plate surfaces to secure or retain the resilient spring elements therein. Hedman also teaches that a coating for osteoconductive purposes is placed on the baseplate surfaces, col. 4, lines 4-9. It would have been obvious to one of ordinary skill in the art to utilize a groove to retain a compressible member therein as taught by Hedman et al. with the implant of Baumgartner such that it provides a more secure fastening of the mesh to the implant surface and eliminates any sliding or dislodgement of the mesh from the baseplates. In addition it would have been obvious to one of ordinary skill in the art to incorporate a coating as taught by Hedman with the vertebral implant of Baumgartner such that it provides a means to bond the surface with the vertebrae.

Claims 11-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner '697 in view of Krebs et al. '685 and in view of Hedman et al. '769. Baumgartner and Hedman et al. are explained above. It can also be seen (Fig. 1a) that the Baumgartner prosthesis is designed for some movement. Baumgartner does disclose materials that permit movement, col. 3, lines 19,20, 31. It can also be seen (Fig. 5) that the central region is remote from the outward surface of the baseplate and

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only perimeter areas that engage the baseplate. However, Baumgartner fails to disclose the outer surface groove and a coating to secure the outer convex contact vertebral member. Krebs et al. teach that a coating or binder is used to secure a metal mesh to the surface of the implant, col. 2, lines 14,17,36-39. It would have been obvious to one of ordinary skill in the art to incorporate a groove in the surface of the plate as taught by Hedman with the spinal implant of Baumgartner having the outer mesh and to further use a coating to secure the mesh as taught by Krebs such that it prevents the contact element from sliding along the surface of the baseplates or being dislodged from the surface.

### ***Response to Arguments***

Applicant's arguments filed 11/1/07 have been fully considered but they are not persuasive. Applicant argues that Baumgartner does not need to be modified to incorporate grooves on the outward facing surface. However, the Examiner notes that deformable structures inherently deflect outward upon forces exerted thereon. As seen in Baumgartner's figures 1A,5 the mesh has a dome shape and thus has "stored" force that upon anatomical loads placed thereon will cause deflection of the mesh. By incorporating the grooves as taught by Hedman into the outward surface of the baseplates, the groove will retain the mesh from deflecting from its location. Thus, the grooves would prevent any dislodged meshes from happening. Applicant also argues that only a perimeter of the contact element or mesh is disposed in the groove. As seen in Baumgartner's device, only the ends or perimeter would be disposed in the groove

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since it is domed and Hedman also supports this since only the perimeter or end that engages the baseplate is in the groove to hold. Thus, the domed mesh of Baumgartner as modified by Hedman would have its perimeter region in the outward facing groove since only the part that engages the baseplate needs to be in the groove to retain. Krebs further enhances the modification by providing a permanent means of securement with the coating and would prevent any chance of the mesh from sliding out of the groove. Thus, the rejections are maintained.

### ***Conclusion***

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Pellegrino whose telephone number is 571-272-4756. The examiner can normally be reached on Monday-Friday from 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRIAN E. PELLEGRINO  
PRIMARY EXAMINER

